



AMENDMENT

Please amend the application as follows:

In the Claims:

Please cancel claims 1 and 3-21 without prejudice, and amend claims 22-33 and 37-39 as follows:

1. (Canceled).

2. (Previously canceled).

3. (Canceled).

4. (Canceled).

5. (Canceled).

6. (Canceled).

7. (Canceled).

8. (Canceled).

9. (Canceled).

10. (Canceled).

11. (Canceled).

12. (Canceled).

13. (Canceled).

14. (Canceled).

15. (Canceled).

16. (Canceled).

17. (Canceled).

18. (Canceled).

19. (Canceled).

20. (Canceled).

21. (Canceled).

22. (Currently amended) A method of assembling a semiconductor package, comprising:
providing a package substrate having a first surface;
including within the semiconductor package an integrated circuit electrically coupled to the
package substrate;
forming a first ~~inductance-circuit-inductor~~ within the semiconductor package, the first
~~inductance-inductor~~ being formed at least partially between the integrated circuit and
the package substrate; and
forming a second ~~inductance-circuit-inductor~~ within the semiconductor package, the second
~~inductance-inductor~~ being formed at least partially between the integrated circuit and
the package substrate, the second ~~inductance-circuit-inductor~~ being coupled
electrically in parallel with the first ~~inductance-circuit-inductor~~,

wherein the first and second ~~inductance circuits~~ inductors are formed within the semiconductor package so that an interfering magnetic signal induces a common-mode signal in the parallel combination of the first and second ~~inductance circuits~~ inductors.

23. (Currently Amended) The method according to claim 22, wherein forming the first ~~inductance circuit inductor~~ further comprises:

providing a first substrate electrical contact on the first surface of the package substrate; and
coupling electrically first and second conductive features between the integrated circuit and the first substrate electrical contact to form an electrically conductive path.

24. (Currently amended) The method according to claim 23, wherein forming the second ~~inductance circuit inductor~~ further comprises:

providing a second substrate electrical contact on the first surface of the package substrate;
and
coupling electrically third and fourth conductive features between the integrated circuit and the first substrate electrical contact to form an electrically conductive path.

25. (Currently amended) The method according to claim 24, wherein forming the first ~~inductance circuit inductor~~ further comprises:

including within the package substrate a first set of at least two alternative substrate electrical contacts corresponding to the first ~~inductance circuit inductor~~ to provide alternate electrical connection points during package assembly for at least one or both of the first and second conductive features of the first ~~inductance circuit inductor~~,

wherein an inductance value of the first ~~inductance circuit inductor~~ depends on the identity of the alternative substrate electrical contact selected in the first set of at least two alternative substrate electrical contacts for coupling electrically to at least one or both of the first and second conductive features.

26. (Currently amended) The method according to claim 25, wherein forming the second ~~inductance circuit inductor~~ further comprises:

including within the package substrate a second set of at least two alternative substrate electrical contacts corresponding to the second ~~inductance circuit inductor~~ to provide alternate electrical connection points during package assembly for at least one or both of the third and fourth conductive features of the second ~~inductance circuit inductor~~, wherein an inductance value of the second ~~inductance circuit inductor~~ depends on the identity of the alternative substrate electrical contact selected in the second set of at least two alternative substrate electrical contacts for coupling electrically to at least one or both of the third and fourth conductive features.

27. (Currently amended) The method according to claim 26, wherein the first set of alternative substrate electrical contacts comprises alternative substrate bonding pads disposed at variable distances from the integrated circuit, and wherein the first and second conductive features of the first ~~inductance circuit inductor~~ comprise first and second wire bonds electrically coupled to a selected one of the alternative substrate bonding pads to form an electrically conductive path having an inductance value at least partially dependent on at least one of the lengths of the first and second wire bonds, the distance between the first and second wire bonds, or both.

28. (Currently amended) The method according to claim 27, wherein the second set of alternative substrate electrical contacts comprises alternative substrate bonding pads disposed at variable distances from the integrated circuit, and wherein the third and fourth conductive features of the second ~~inductance circuit inductor~~ comprise third and fourth wire bonds electrically coupled to a selected one of the alternative substrate bonding pads to form an electrically conductive path having an inductance value at least partially dependent on at least one of the lengths of the third and fourth wire bonds, the distance between the third and fourth wire bonds, or both.

29. (Currently amended) The method according to claim 26, wherein the first set of alternative substrate electrical contacts corresponding to the first ~~inductance circuit inductor~~ comprises alternative pairs of first and second substrate bonding pads positioned at variable locations on or within the package substrate, each of the first and second substrate bonding pads of a bonding pad pair being electrically coupled to one another on or within the package substrate by a fifth conductive feature, and wherein the first and second conductive features of the first ~~inductance~~

~~circuit-inductor~~ comprise first and second solder bumps positioned so that they are electrically coupled to a selected respective alternative pair of first and second substrate bonding pads to form an electrically conductive path.

30. (Currently amended) The method according to claim 29, wherein the second set of alternative substrate electrical contacts corresponding to the second ~~inductance-circuit-inductor~~ comprises alternative pairs of third and fourth substrate bonding pads positioned at variable locations on or within the package substrate, each of the third and fourth substrate bonding pads of a bonding pad pair being electrically coupled to one another on or within the package substrate by a sixth conductive feature, and wherein the third and fourth conductive features of the second ~~inductance-circuit-inductor~~ comprise third and fourth solder bumps positioned so that they are electrically coupled to a selected respective alternative pair of third and fourth substrate bonding pads to form an electrically conductive path.

31. (Currently amended) The method according to claim 26, wherein the first set of alternative substrate electrical contacts corresponding to the first ~~inductance-circuit-inductor~~ comprises alternative pairs of first and second substrate bonding pads positioned at variable locations on or within the package substrate, each of the first and second substrate bonding pads of a bonding pad pair being electrically coupled to one another on or within the package substrate by a fifth conductive feature, and wherein the first and second conductive features of the first ~~inductance-circuit-inductor~~ comprise first and second wire bonds electrically coupled to a selected respective alternative pair of first and second substrate bonding pads to form an electrically conductive path.

32. (Currently amended) The method according to claim 31, wherein the second set of alternative substrate electrical contacts corresponding to the second ~~inductance-circuit-inductor~~ comprises alternative pairs of third and fourth substrate bonding pads positioned at variable locations on or within the package substrate, each of the third and fourth substrate bonding pads of a bonding pad pair being electrically coupled to one another on or within the package substrate by a sixth conductive feature, and wherein the third and fourth conductive features of the second ~~inductance-circuit-inductor~~ comprise third and fourth wire bonds electrically coupled to a selected respective alternative pair of third and fourth substrate bonding pads to form an electrically conductive path.

33. (Currently amended) The method according to claim 26, further comprising providing a phase locked loop circuit within the integrated circuit, the phase locked loop circuit being electrically coupled to the first and second ~~inductance circuits~~ inductors.

34. (Original) The method according to claim 33, further comprising including a controlled oscillator circuit within the phase locked loop circuit.

35. (Original) The method according to claim 34, wherein the controlled oscillator circuit has an output frequency that is selectably operable within a plurality of frequency bands.

36. (Original) The method according to claim 35, wherein the controlled oscillator circuit comprises an inductor-capacitor tank circuit.

37. (Currently amended) The method according to claim 36, wherein the inductor-capacitor tank circuit comprises a capacitor electrically coupled to the first and second ~~inductance circuits~~ inductors.

38. (Currently amended) The method according to claim 37, wherein the first and second ~~inductance circuits~~ inductors are formed entirely within the semiconductor package.

39. (Currently amended) The method according to claim 26, wherein the first and second ~~inductance circuits~~ inductors are formed symmetrically with respect to each other.